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(54) BEARING DEVICE AND SPINDLE MOTOR FOR MAGNETIC RECORDER USING THIS BEARING DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a highly accurate and long-life bearing device which effectively prevents the outflow of oil by interposedly inserting oil shield plates between axial end faces of a plurality of oilless bearings.

SOLUTION: Oil shield plates 30 are interposedly inserted between respective oilless bearings of a plurality of cylindrical oilless bearings 26a-26c and oil hold plates 31, 32 are provided in contact with the top face of the oilless bearing 26a and the bottom face of the oilless bearing 26c so that oil is prevented from leaking out from the end faces of the respective oilless bearings to the adjoining oilless bearings. When a rotary shaft 24 is rotated in high speed, the oil pumped out by rotation of the rotary shaft 24 is blocked by the oil shield plate 30, prevented from flowing into the oilless bearings 26a-26c arranged in the adjacent thereto returns to the rotary shaft 26a, and works in such a state as raising the pressure of the oil between the rotary shaft 24 and the oilless bearings 26a-26c and as preventing the direct contact between the rotary shaft 24 and the oilless bearings. The vibration of the rotary shaft 24 can be thus held small for a long time so as to provide a highly accurate bearing device.

